

Wash Water System Pays for Itself in Less Than a Year



A sugar cane factory in Jeanerette, Louisiana, was experiencing difficulties and equipment failures due to excessive abrasives (sand, grit, small rocks) introduced during the initial washing phase.

The need to recycle the wash water necessitated the use of a large clarifier on site and a series of ponds that looped around the mill and allowed the solids to settle before reuse.

Lack of available expansion space and large volumes of chemicals needed to treat the pH of the sugar-laden water were costly. Pumps supplying the water to the wash table and the clarifier underflow pumps were inefficient and not capable of handling the volume of solids in the circuit.

GIW LCC pumps were in use at the plant initially in boiler ash removal and had shown little or no wear.

Hunter Equipment Company, an authority on slurry-handling systems, designed a system around the replacement of the wash table feed

pumps and the need for a more efficient system.

A GIW 18x18 LHD 33 supplies a bank of eight hydrocyclones at a rate of 16,000 gpm and discharge pressure of 35 psi. The cyclone overflow (free of solids) flows into a tank where two GIW 12x14 LCC 28's send it back to the wash table.

The cyclone underflow is gravity fed into an agitated tank feeding a GIW 6x8 LCC 20 and sends the solids to an impoundment two-and-a-half miles away. The plant took the overworked clarifier out of service and uses the pump/cyclone system to clean the wash water continually and reduce the need for makup water by 70 percent.

The entire system provided the mill with lower maintenance and chemical additive costs and reduced power consumption. The system paid for itself in less than a year.

For more information, call 225.929.6546 or e-mail sales@hunterequipmentco.com.

To view more photos for this installation, visit www.hunterequipmentco.com.